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Fig. 1a

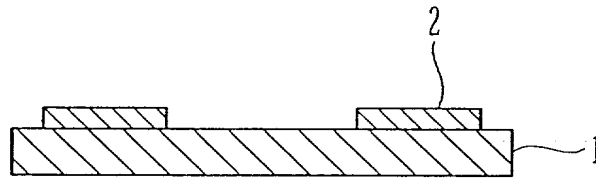


Fig. 1b

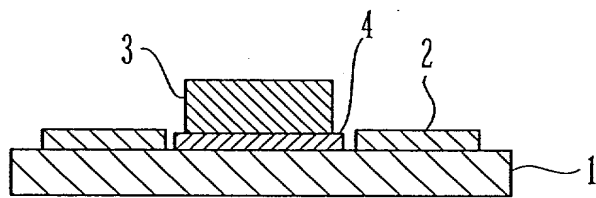


Fig. 1c

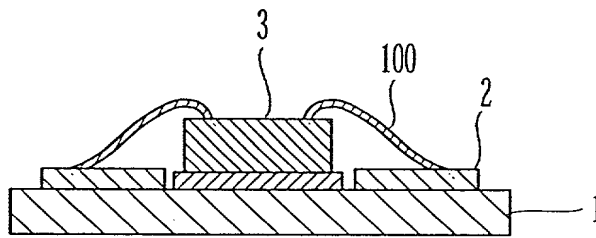


Fig. 1d

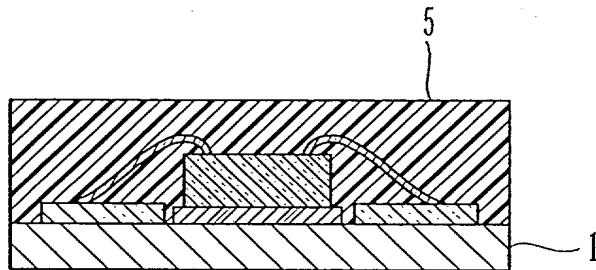


Fig. 1e

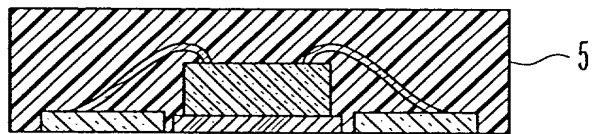
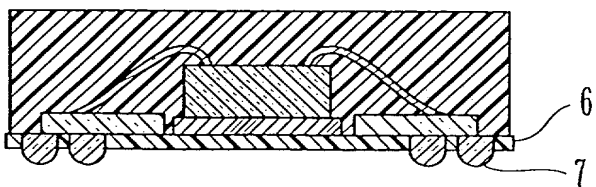
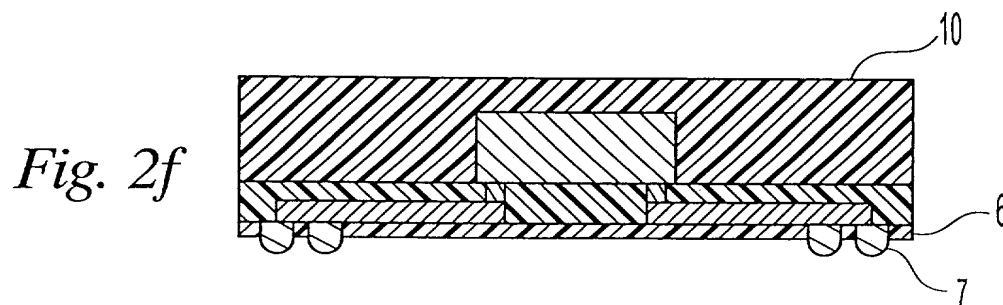
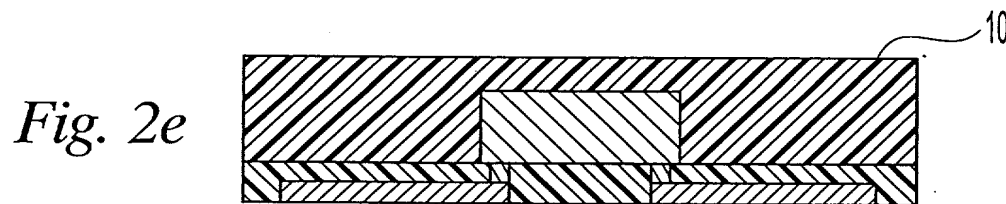
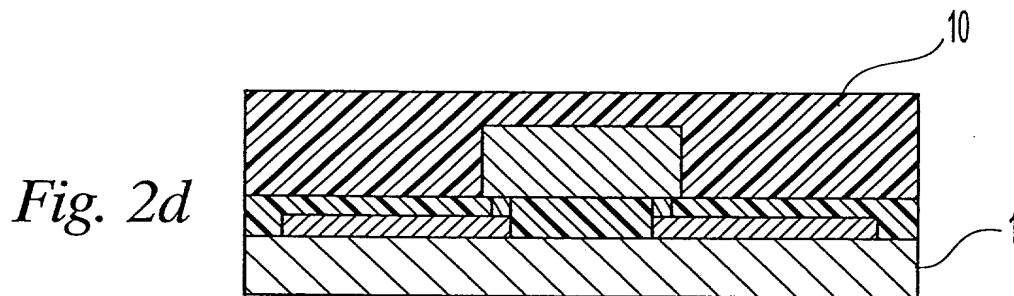
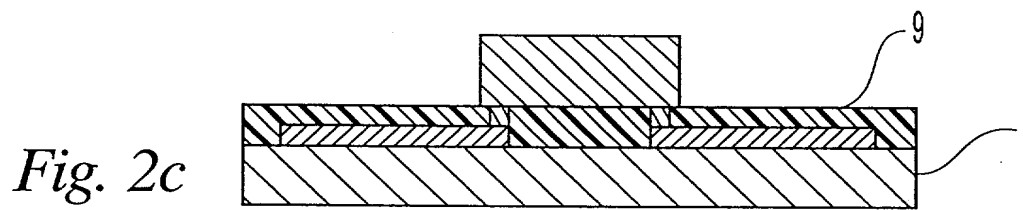
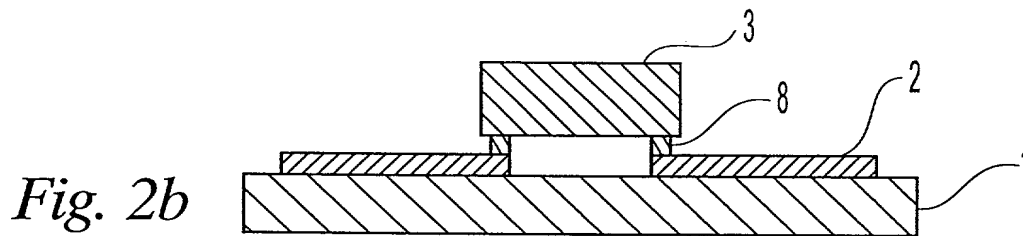
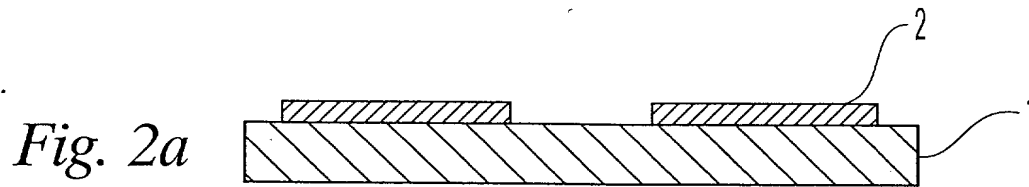


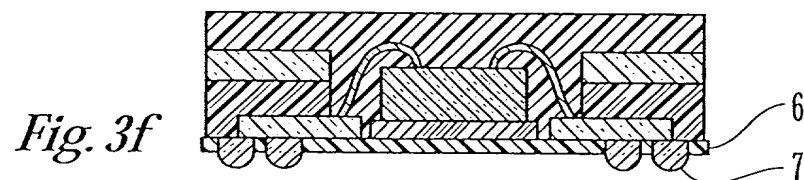
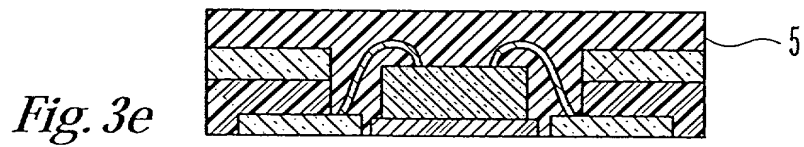
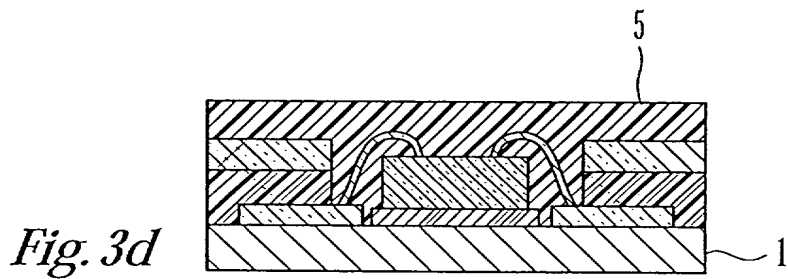
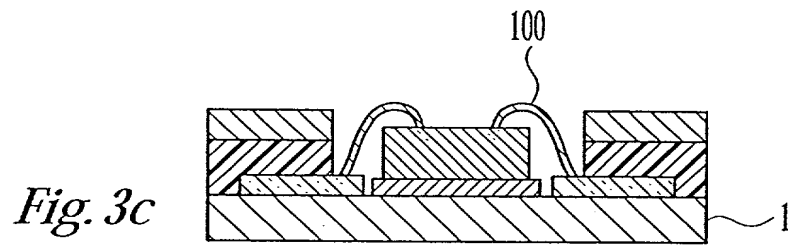
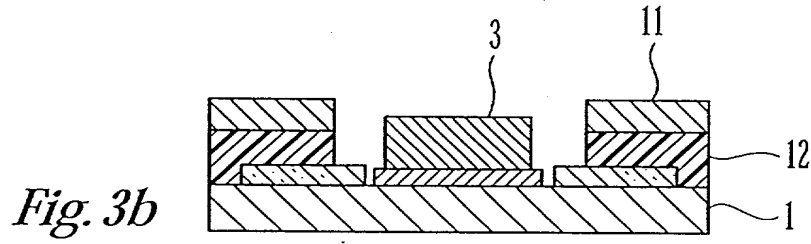
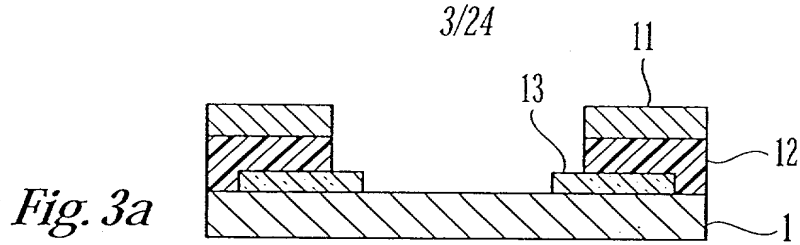
Fig. 1f



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Fig. 4a

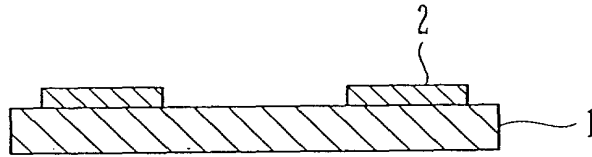


Fig. 4b

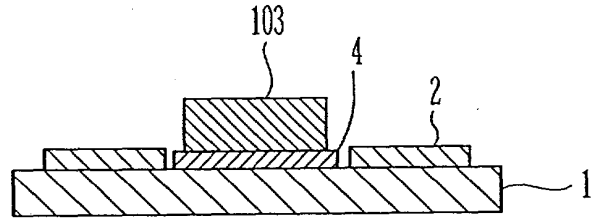


Fig. 4c

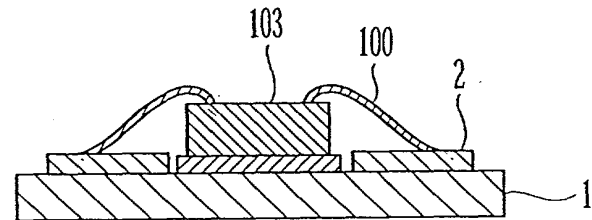


Fig. 4d

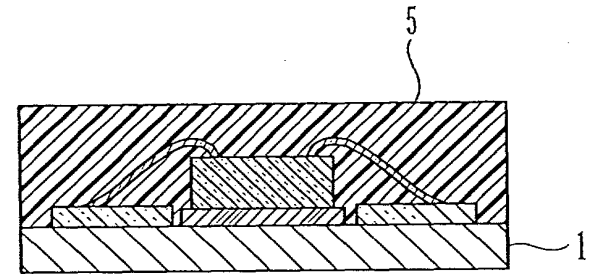


Fig. 4e

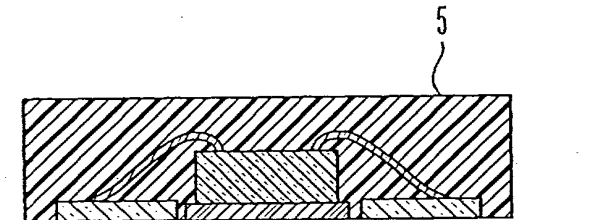
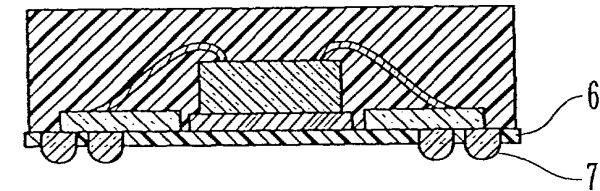
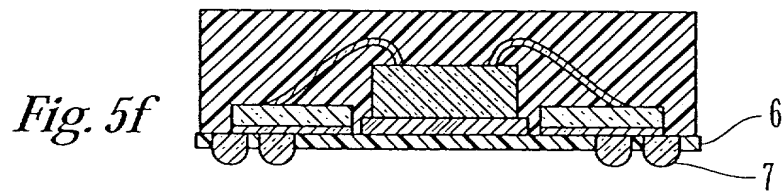
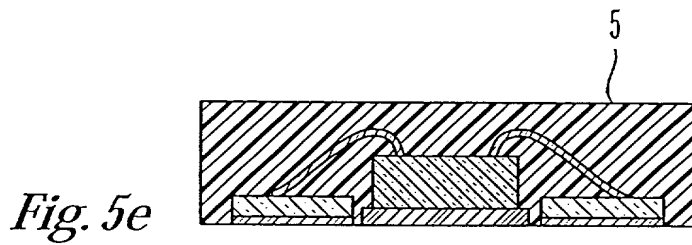
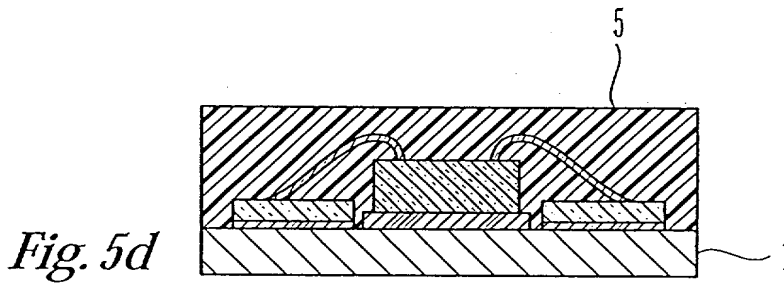
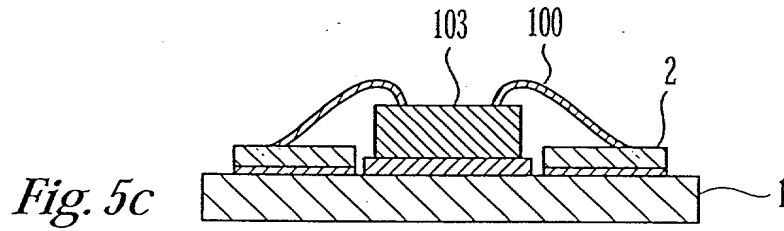
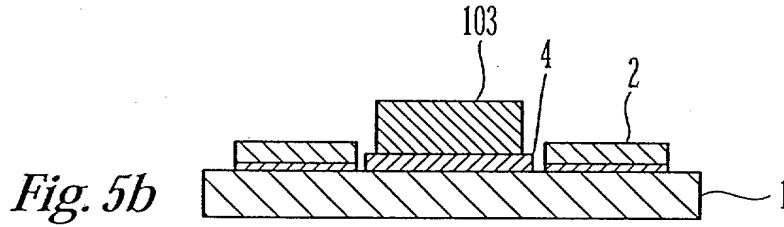
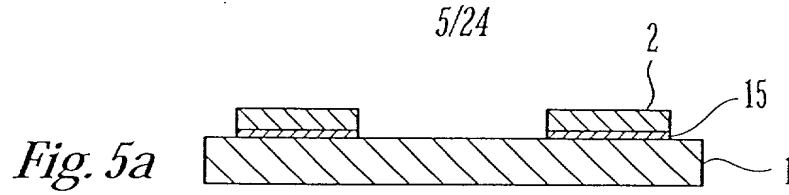
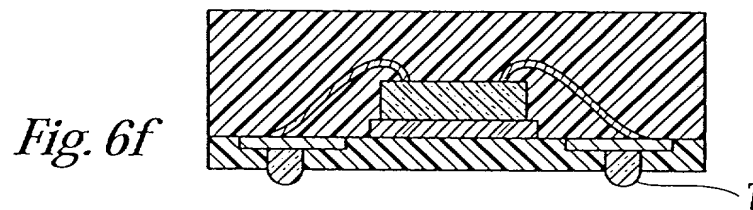
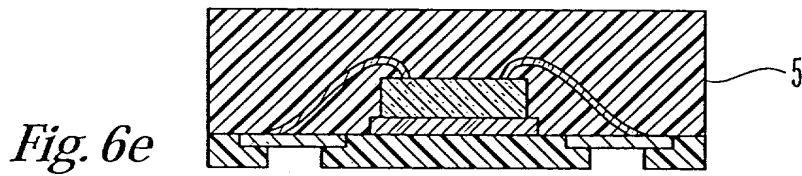
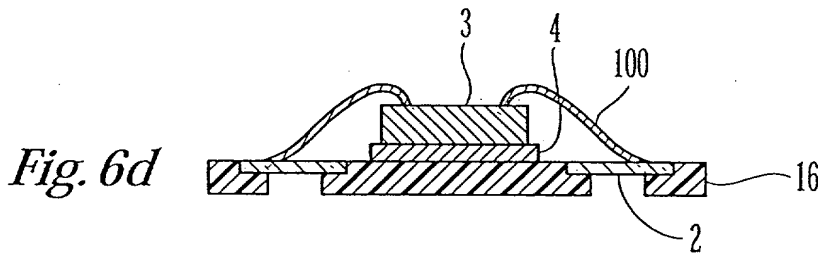
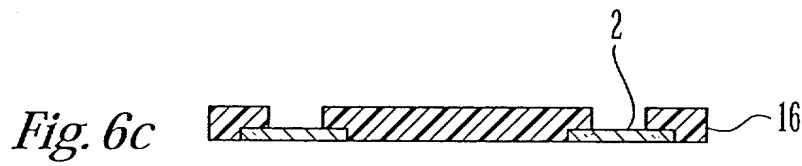
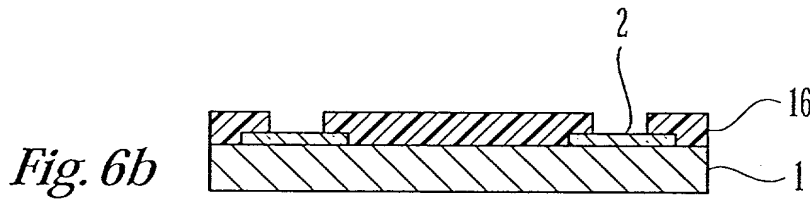
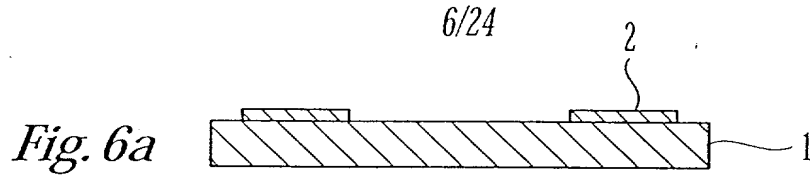


Fig. 4f





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Fig. 7a

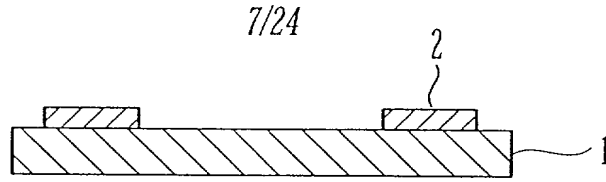


Fig. 7b

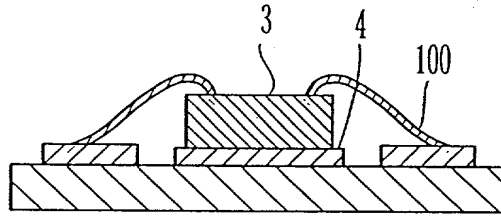


Fig. 7c

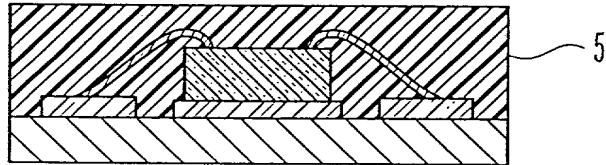


Fig. 7d

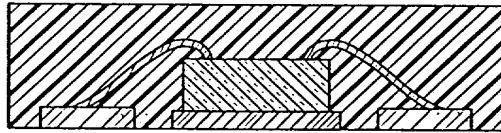


Fig. 7e

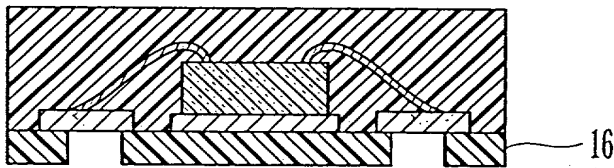
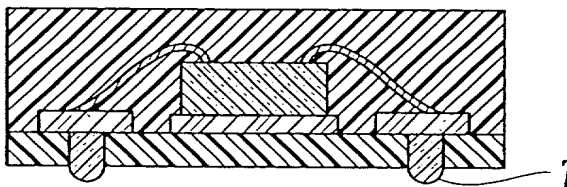


Fig. 7f



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Fig. 8a

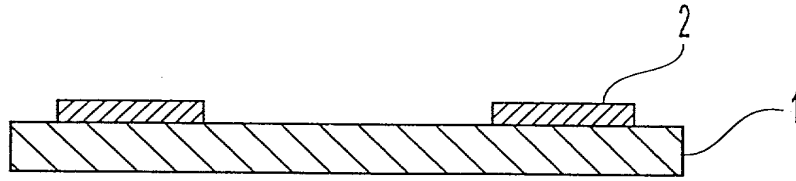


Fig. 8b

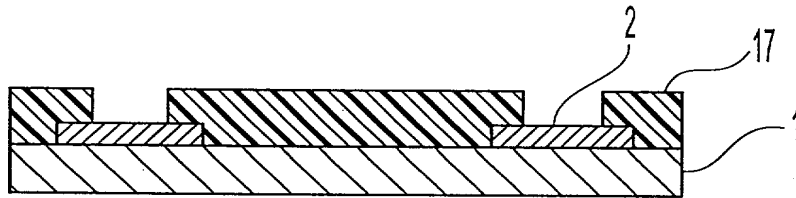


Fig. 8c



Fig. 8d

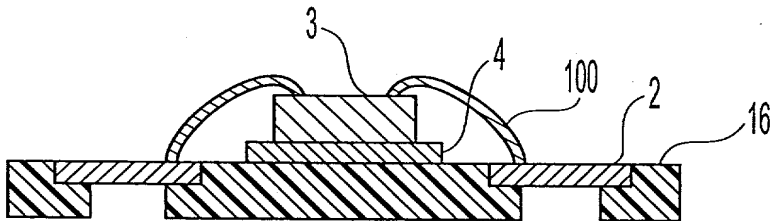


Fig. 8e

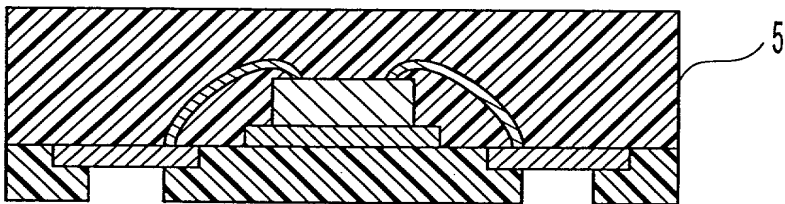
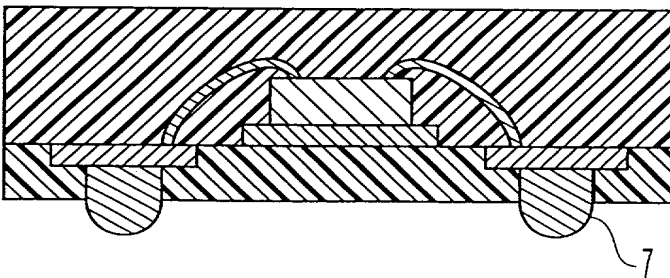
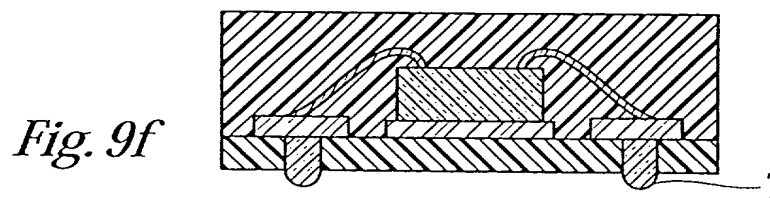
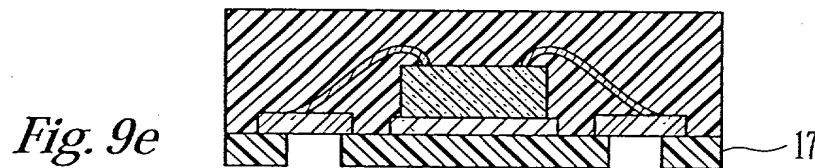
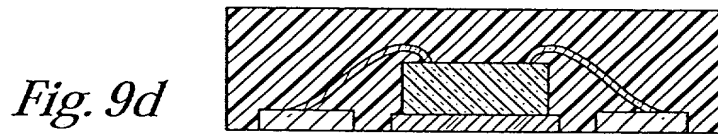
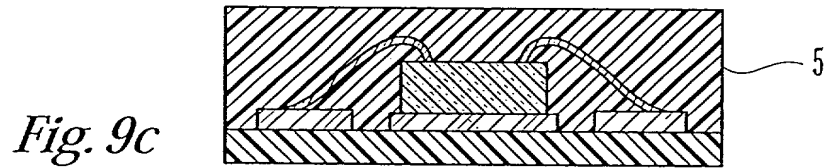
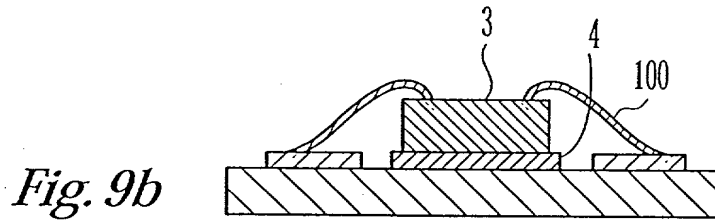
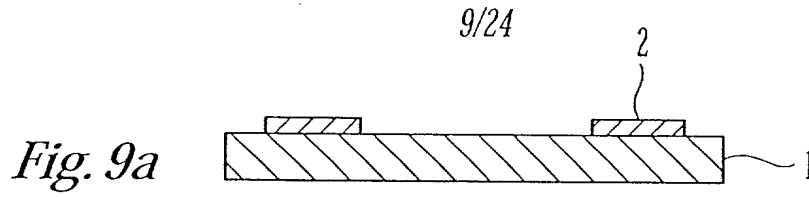


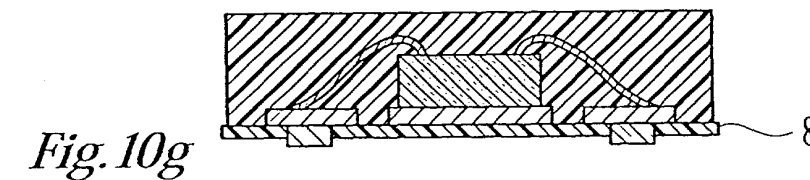
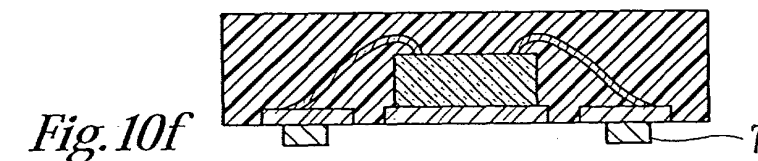
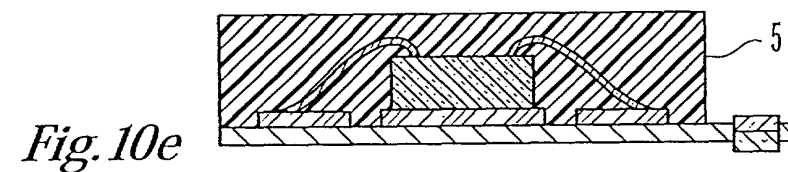
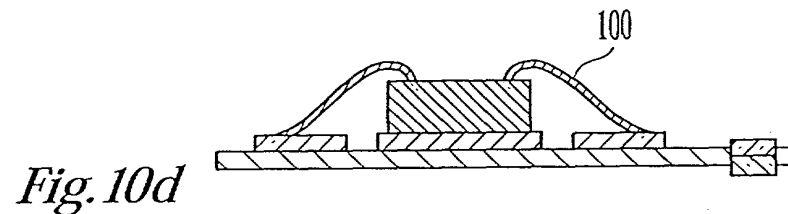
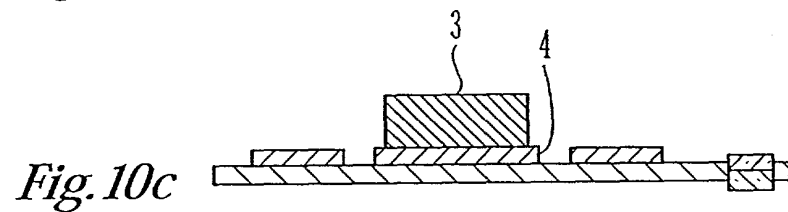
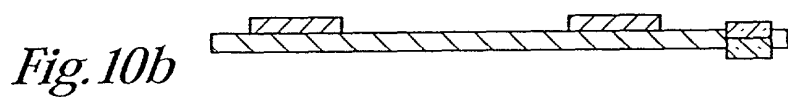
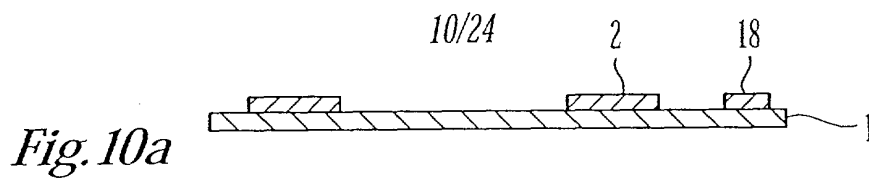
Fig. 8f







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Fig. 11a

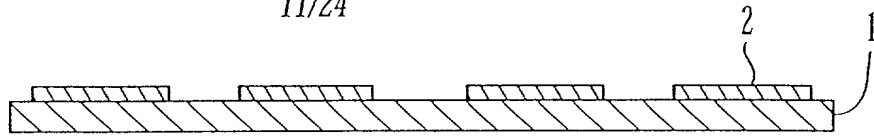


Fig. 11b

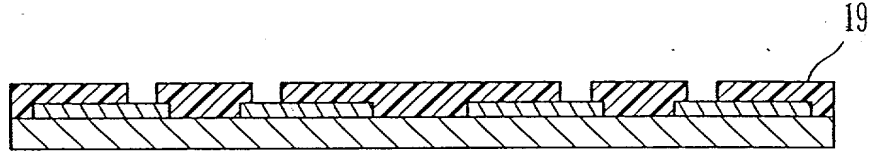


Fig. 11c



Fig. 11d

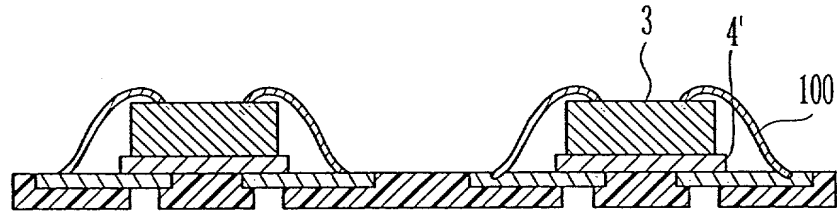


Fig. 11e

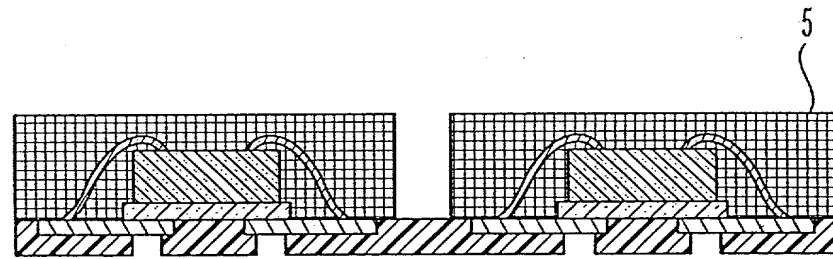


Fig. 11f

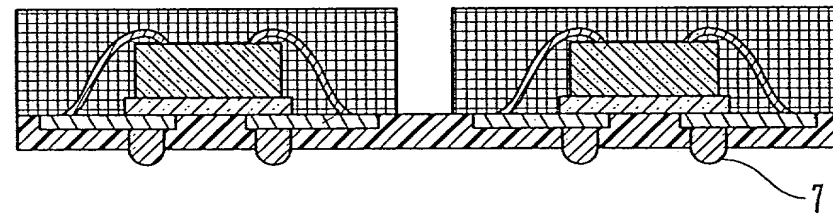
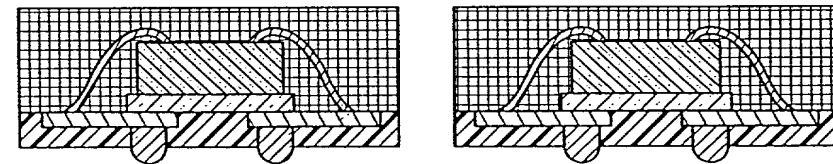


Fig. 11g



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Fig. 12a

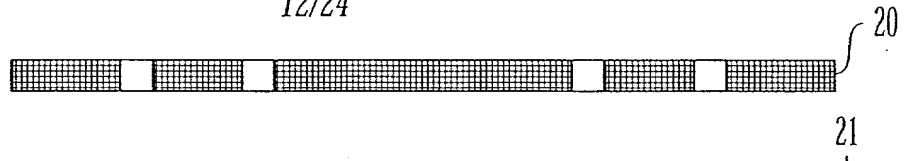


Fig. 12b

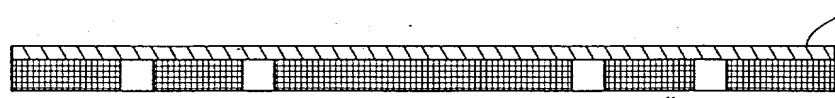


Fig. 12c

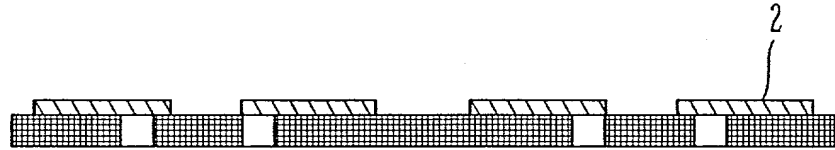


Fig. 12d

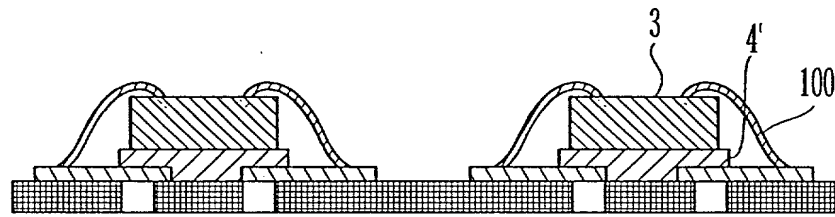


Fig. 12e

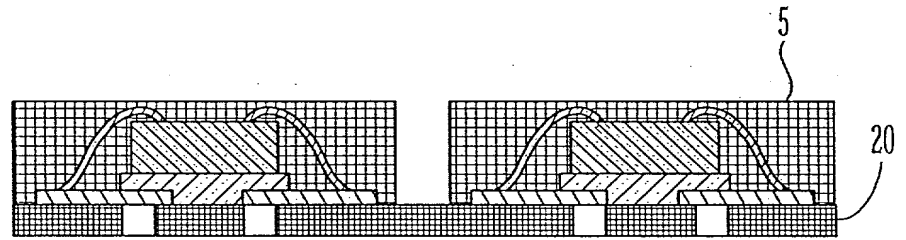


Fig. 12f

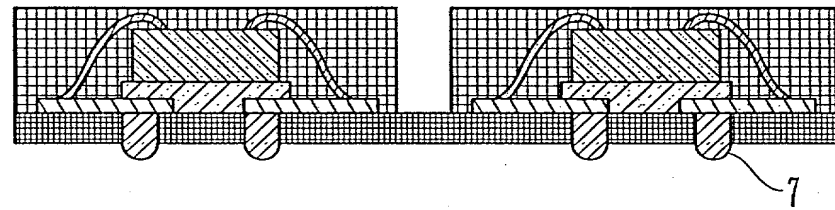


Fig. 12g

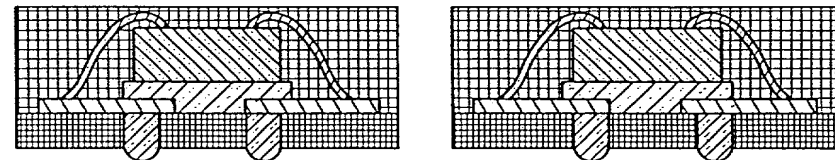


Fig. 13a

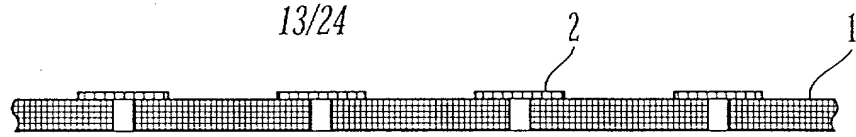


Fig. 13b

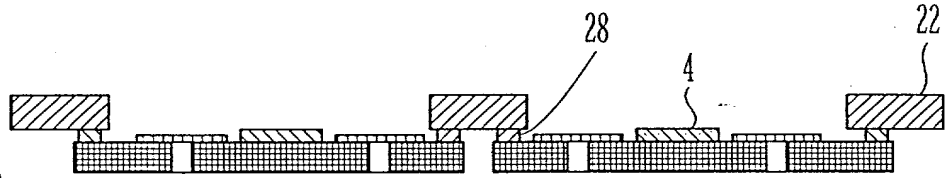


Fig. 13c

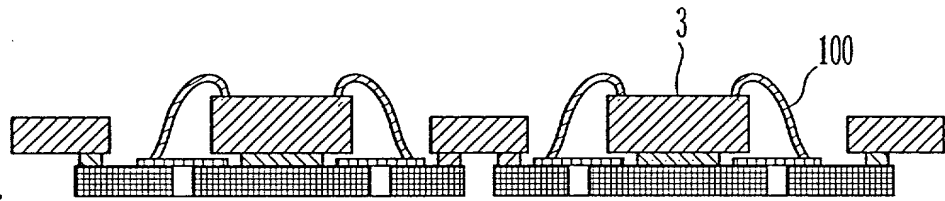


Fig. 13d

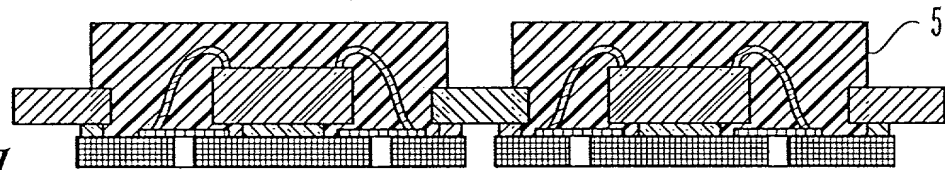


Fig. 13e

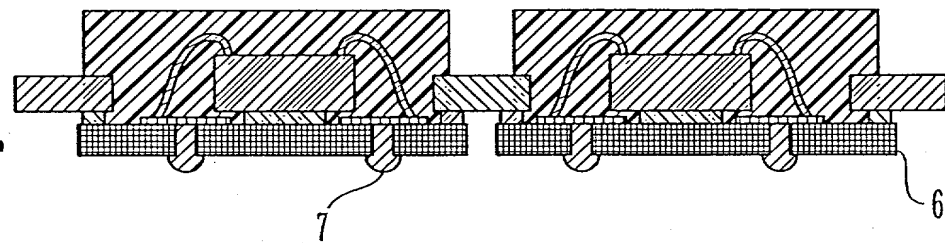
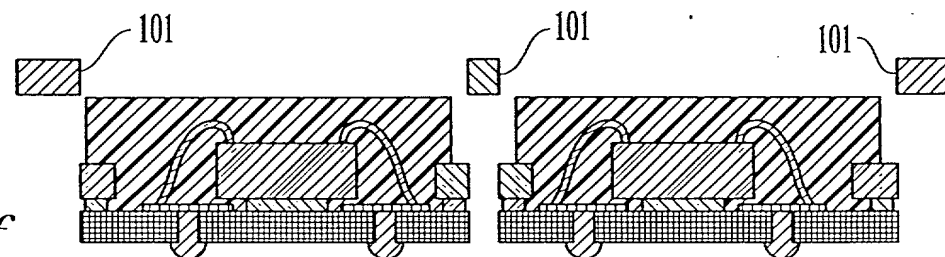


Fig. 13f



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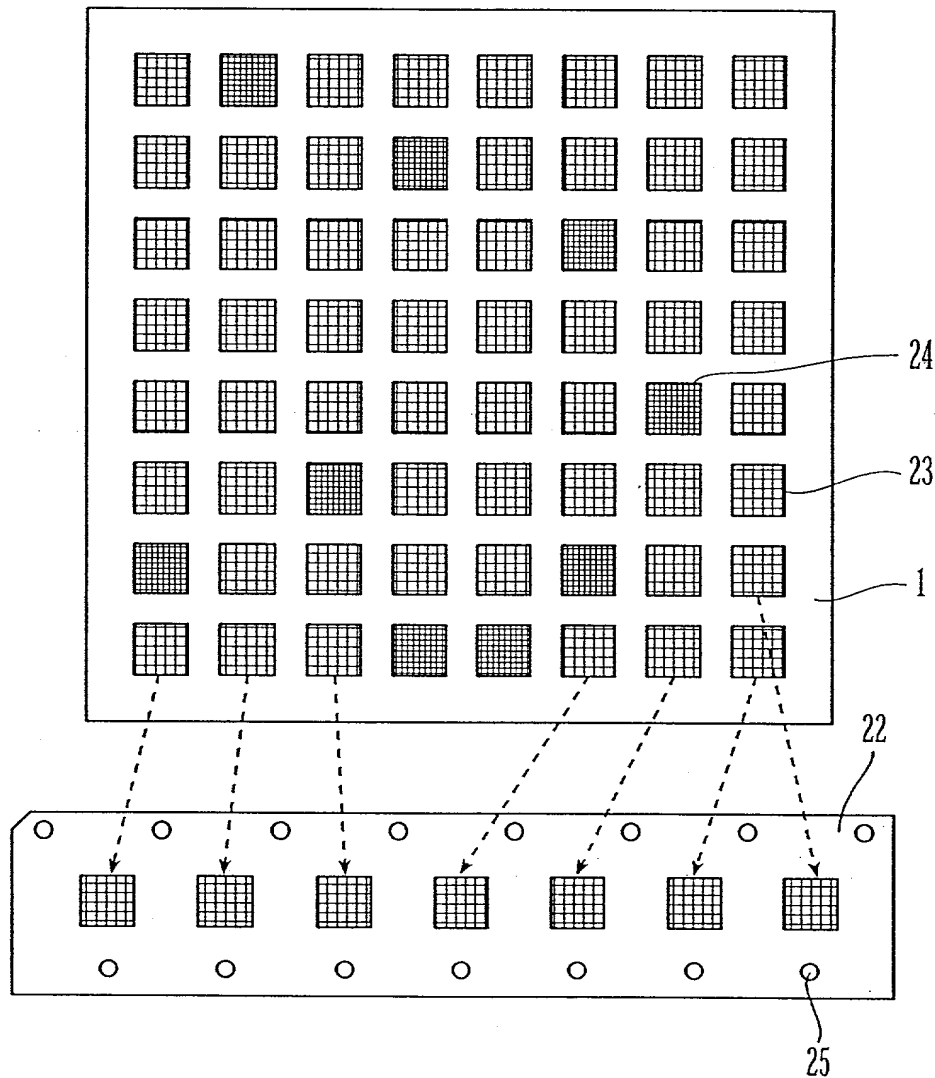
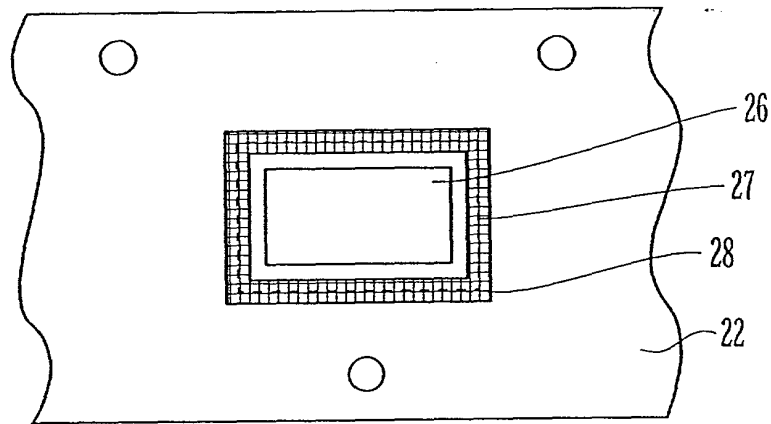
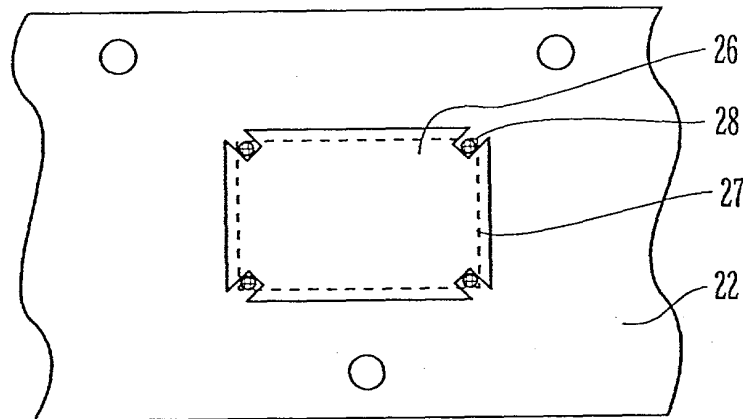


Fig. 14

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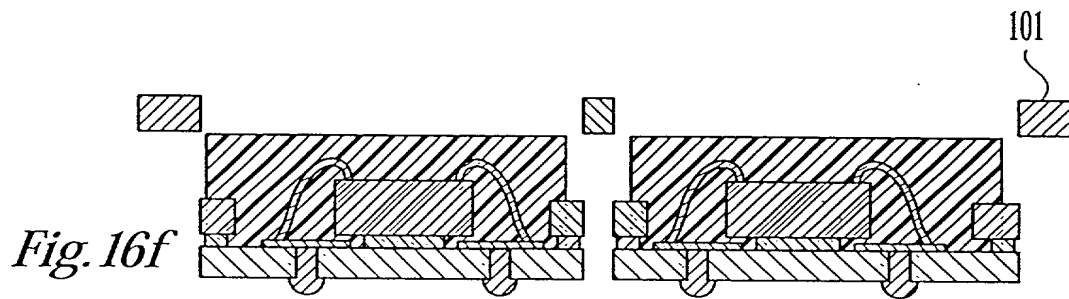
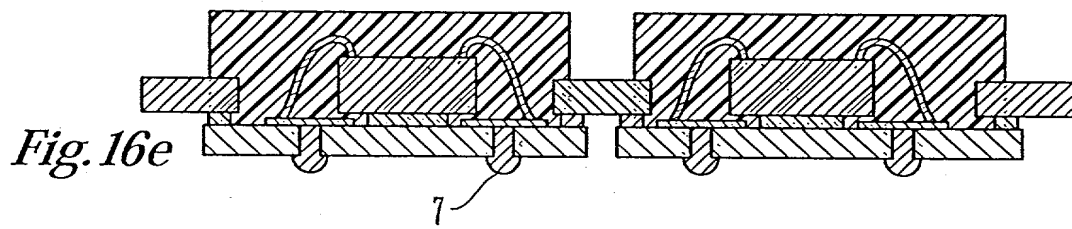
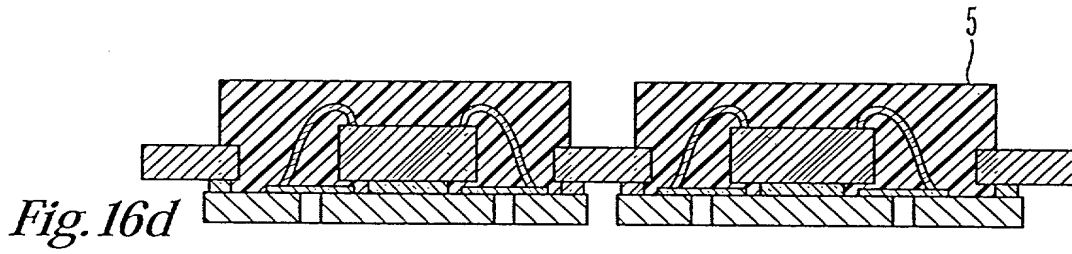
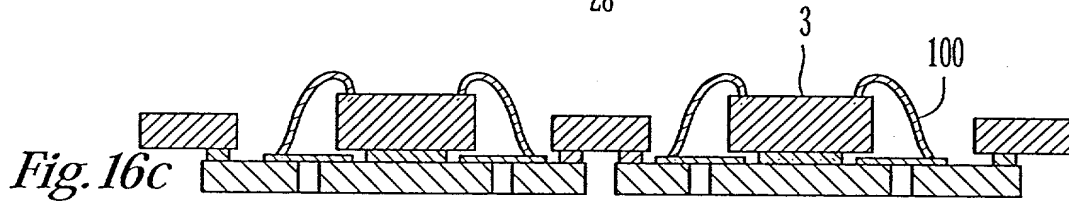
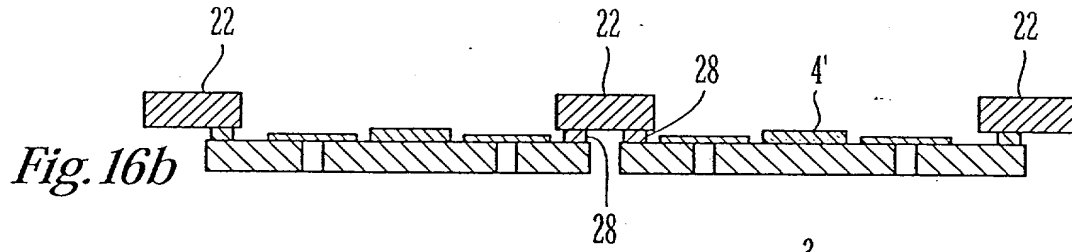
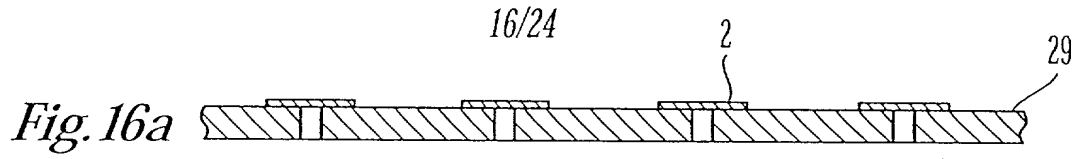


*Fig. 15a*



*Fig. 15b*

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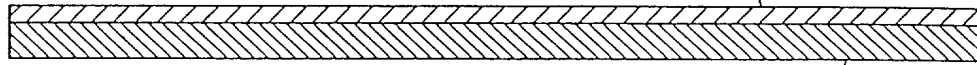




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Fig. 17a



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Fig. 17b

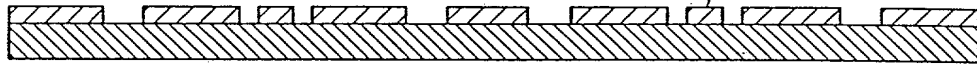
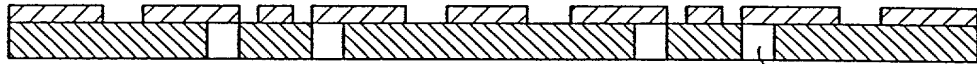


Fig. 17c



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Fig. 17d

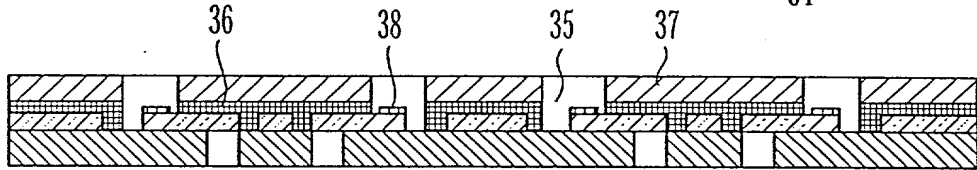


Fig. 17e

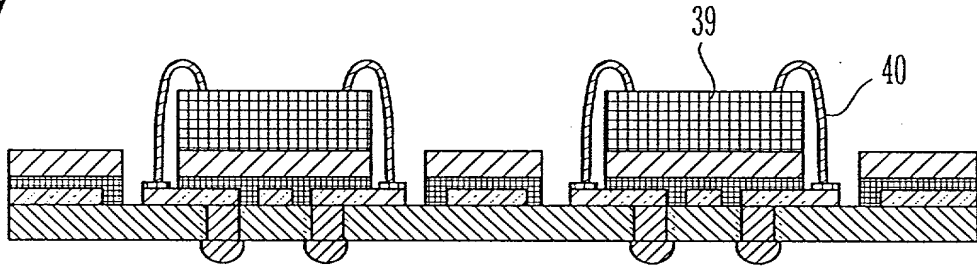


Fig. 17f

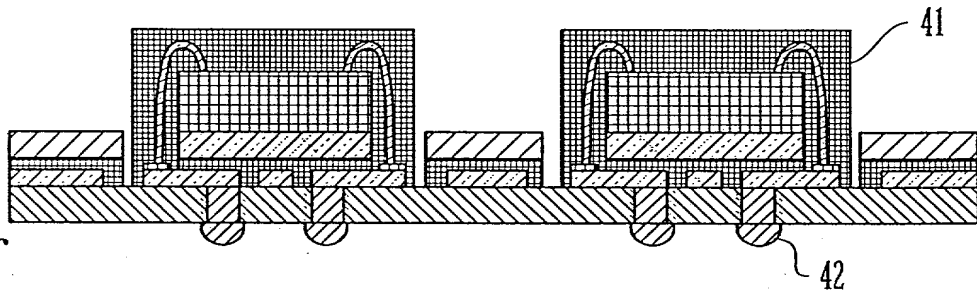
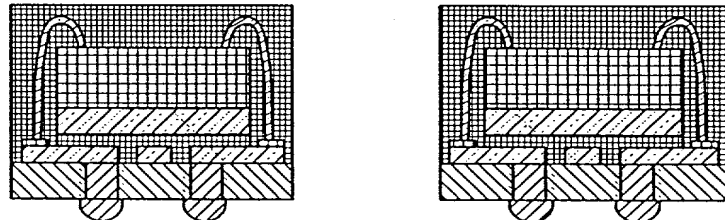
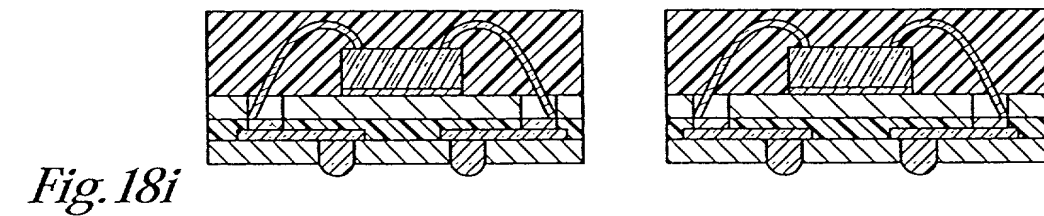
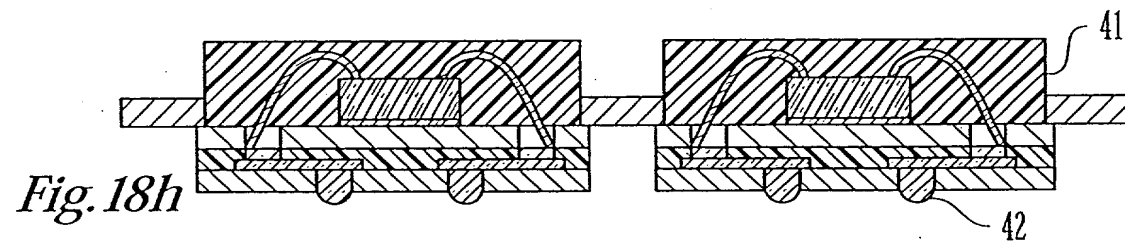
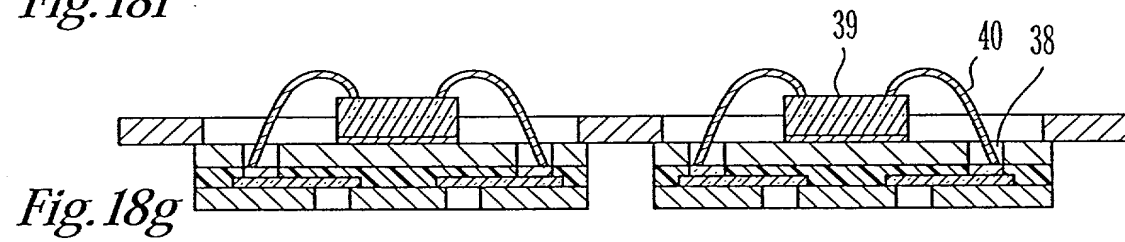
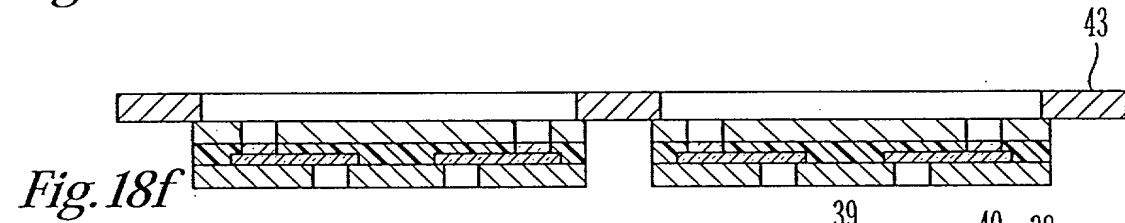
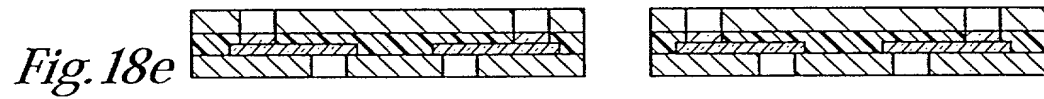
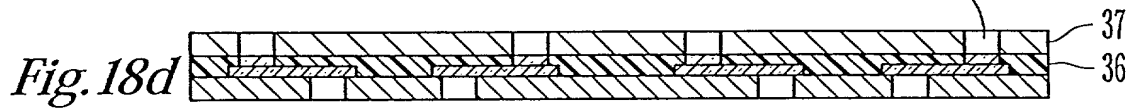
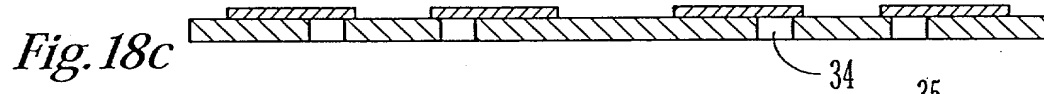
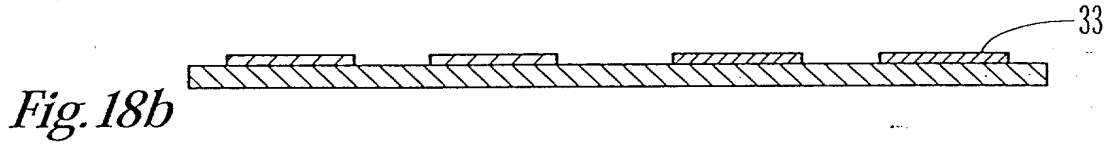
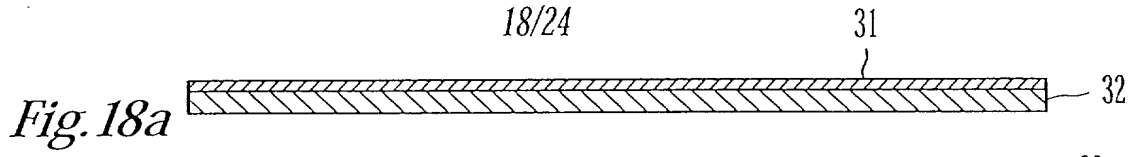


Fig. 17g





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Fig. 19a

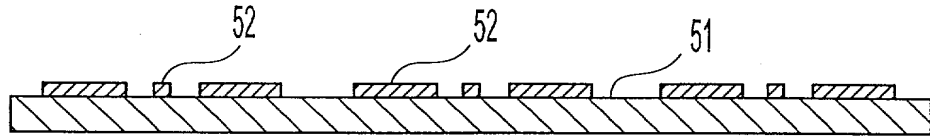


Fig. 19b

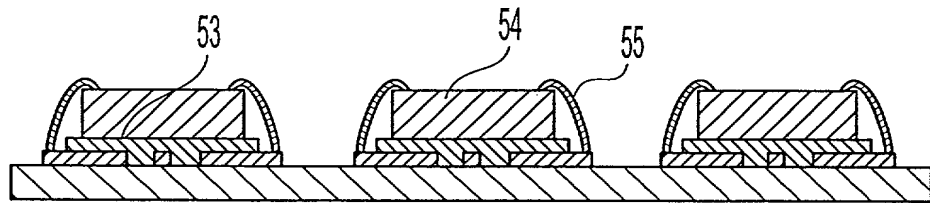


Fig. 19c

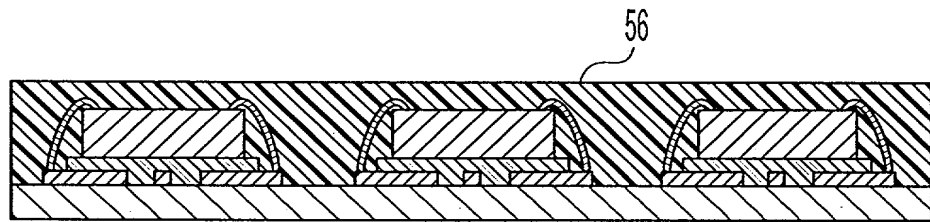


Fig. 19d

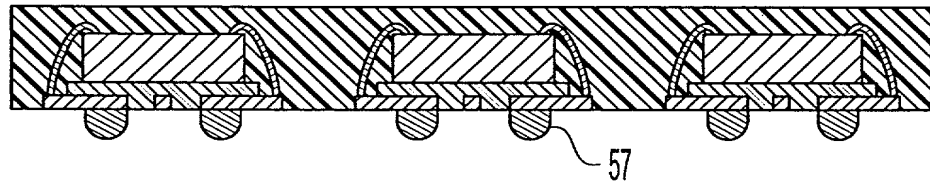
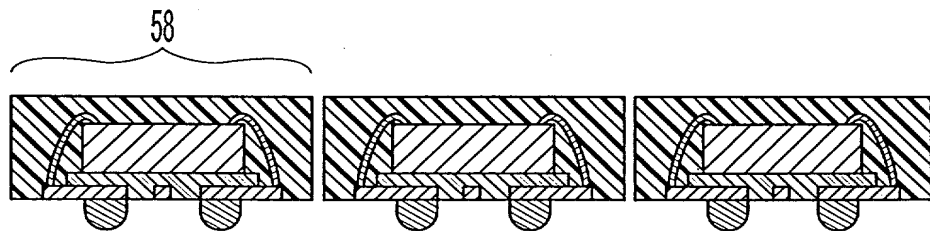
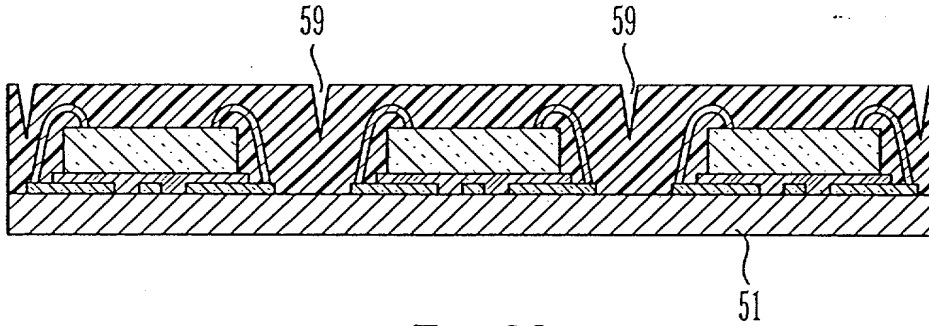


Fig. 19e

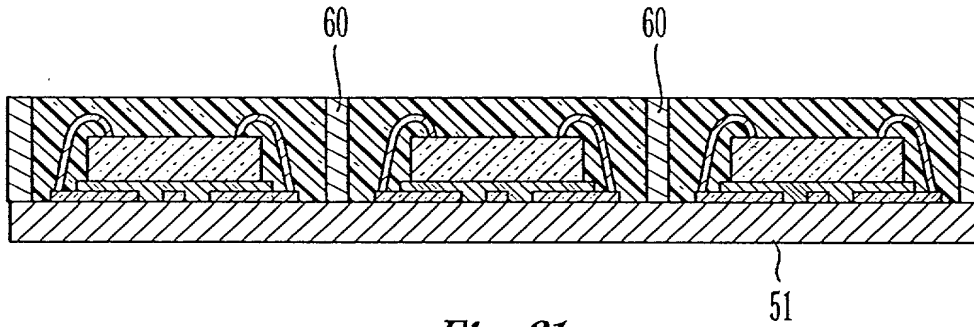


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*Fig. 20*



*Fig. 21*

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Fig. 22a

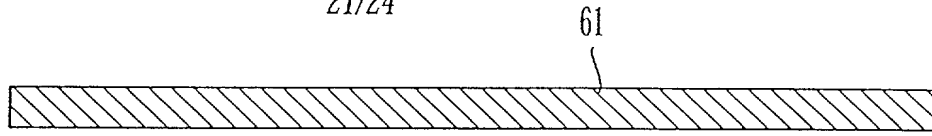
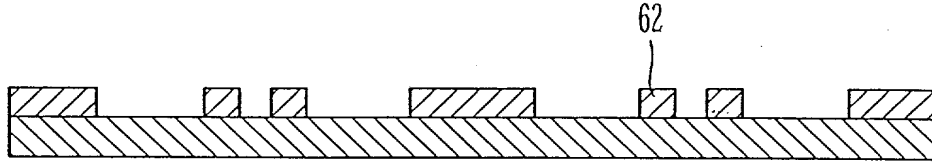


Fig. 22b



22c

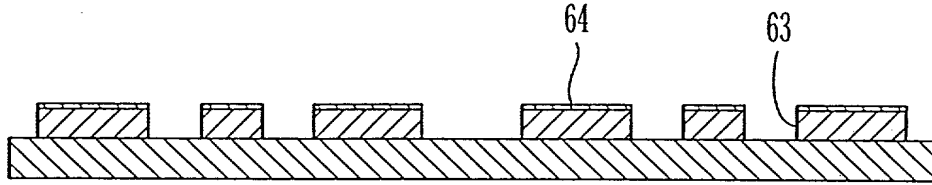


Fig. 22d

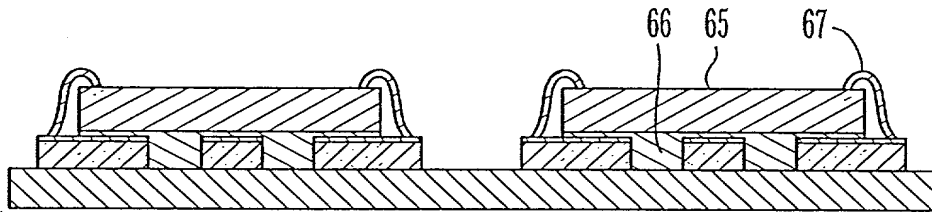


Fig. 22e

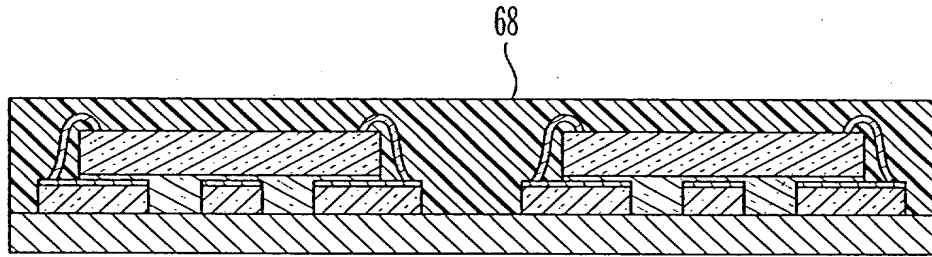


Fig. 22f

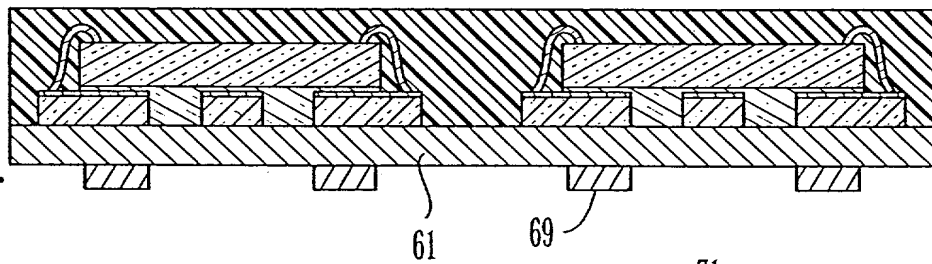
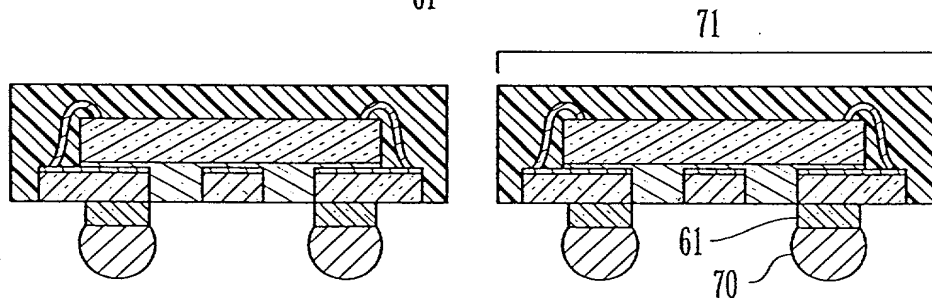
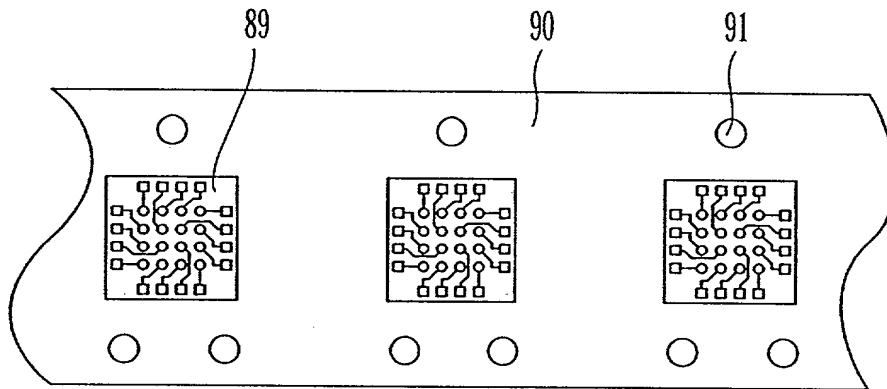


Fig. 22g



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*Fig. 23*

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Fig. 24a

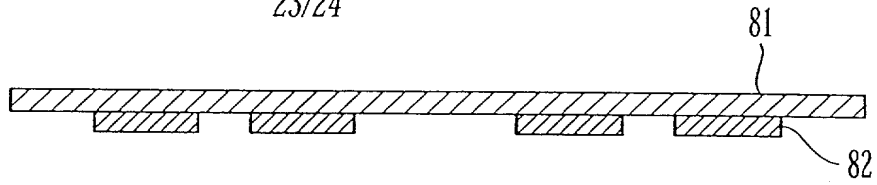


Fig. 24b

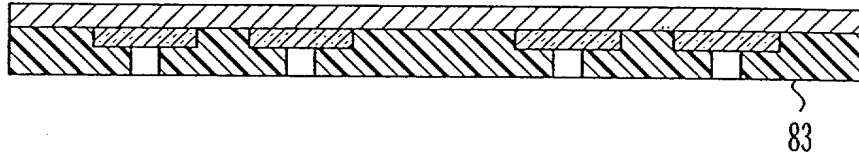


Fig. 24c

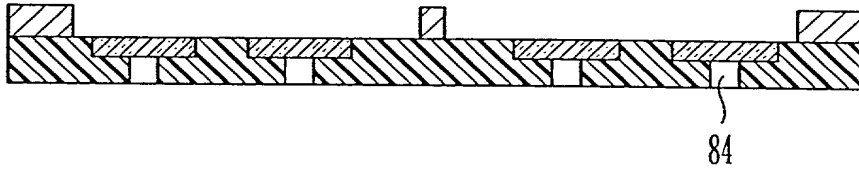


Fig. 24d

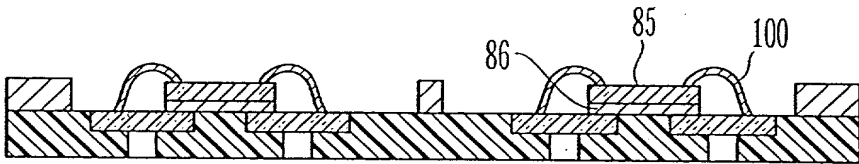


Fig. 24e

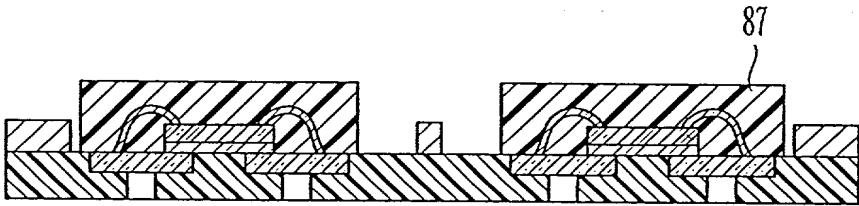


Fig. 24f

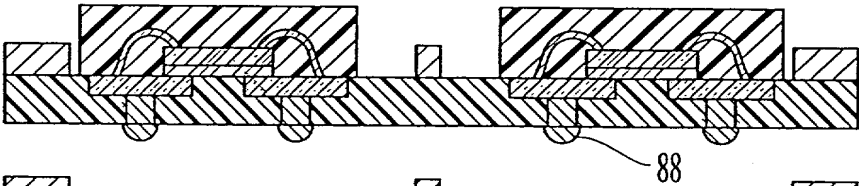
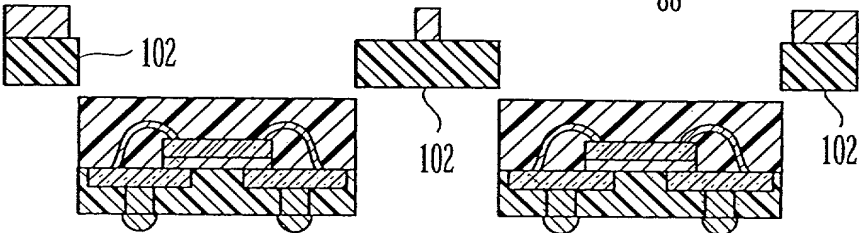


Fig. 24g



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A cross-sectional view of a substrate 83. The substrate has a top surface with a series of rectangular protrusions or bumps. The substrate is shown in a cross-section with diagonal hatching. The label 83 is positioned below the substrate, with a line pointing to it.

A cross-sectional view of a semiconductor device. It shows a substrate with a patterned layer 84 on top. Below layer 84, there is a series of small rectangular features 100, which appear to be part of a buried layer or a series of vias.

This cross-sectional view shows a second gate electrode 87, which is a rectangular block with diagonal hatching, positioned on top of the gate insulating film 81. It is located over the second gate insulating film 82 and the second gate electrode 83. The gate insulating film 81 is a thin layer with horizontal hatching. The second gate insulating film 82 is a thicker layer with diagonal hatching. The second gate electrode 83 is a layer with diagonal hatching. The substrate 84 is a thick layer with diagonal hatching. The second gate electrode 87 is connected to the second gate electrode 83. The label 87 points to the second gate electrode.

A cross-sectional view of a multi-layered substrate. It consists of a central conductive layer (hatched with diagonal lines) sandwiched between two insulating layers (hatched with horizontal lines). The central layer has a central opening. Solder balls (hatched with diagonal lines) are attached to the top and bottom surfaces of the central layer, bridging the gap between the central opening and the outer edges of the substrate. A label '88' points to the solder balls.